

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
Lake Calumet Smelter - Removal Polrep



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region V**

**Subject:**           **POLREP #2**  
                          **Progress Report**  
                          **Lake Calumet Smelter**  
                          **B5FM**  
                          **Chicago, IL**  
                          **Latitude: 41.6776690 Longitude: -87.6057530**

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                          debbie Keating, EESS  
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                          Joseph Ruiz, Weston  
                          Janet Pope, EPA

**From:**             Bradley Benning, OSC

**Date:**             10/21/2013

**Reporting Period:** 10/16/2013 to 10/21/2013

## **1. Introduction**

### **1.1 Background**

<b>Site Number:</b>	B5FM	<b>Contract Number:</b>	EP-S5-08-04
<b>D.O. Number:</b>	054	<b>Action Memo Date:</b>	9/27/2013

<b>Response Authority:</b> CERCLA	<b>Response Type:</b> Time-Critical
<b>Response Lead:</b> EPA	<b>Incident Category:</b> Removal Action
<b>NPL Status:</b> Non NPL	<b>Operable Unit:</b>
<b>Mobilization Date:</b> 10/7/2013	<b>Start Date:</b> 10/7/2013
<b>Demob Date:</b>	<b>Completion Date:</b>
<b>CERCLIS ID:</b> ILN000509228	<b>RCRIS ID:</b> ILD980503213
<b>ERNS No.:</b>	<b>State Notification:</b>
<b>FPN#:</b>	<b>Reimbursable Account #:</b>

### 1.1.1 Incident

Time-Critical Removal Action

### 1.1.2 Site Description

The subject property is situated in an urban/industrial setting within the City of Chicago. Bordering the property on the north is 119th Street (unpaved and currently not in use as a street), beyond which is an open mowed grass field that is part of the Sherwin-Williams Paint Co. property; on the east is bare, filled, open property that is a portion of a storage tank container company, beyond which is I-94; on the south is bare, filled, open property that is another portion of the storage tank container company; and to the west is S. Champlain Ave. (unpaved and currently not used as a street), beyond which are railroad siding tracks and an unknown manufacturing company. Information obtained from the Cook County Assessor Office indicates that the facility's former structure, driveway and parking areas occupy a rectangular shaped property on approximately 5.7 acres of land. According to a 1936 – 1950 Sanborn Fire Insurance Map, the former facility consisted of a two story main building with two one story rooms attached to the south and a one level storage room attached to the west. What appears to be a separate, small smelting building containing a vat was located south and adjacent to the storage room. At some point between the late 1950's to late 1960's, Calumet Lead ceased doing business. Based on United States Geological Survey (USGS) aerial photography from 1998 and 2002 and observations of IEPA personnel during the August 10, 2004 PCS Assessment, and April 25, 2006 site reconnaissance portion of the PA, all that remains of the former structures is a portion of a smoke stack. All other structures have been razed.

#### 1.1.2.1 Location

The Calumet Lead site is an inactive, abandoned metal producing operation located at 11901 S. Champlain Ave., Chicago, Illinois, Township 37 North, Range 14 East, Section 22, Latitude 41.678, Longitude -87.606, in Hyde Park Township, Cook County. The Site was located at the southern end of the City of Chicago, approximately 3000 feet south of E. 115th Street. Interstate 94 is visible approximately 1500 feet east of the facility.

#### 1.1.2.2 Description of Threat

Lead, arsenic, and cadmium were detected above Removal Management Levels (RMLs), and are identified as hazardous substances as defined by Section 101(14) of CERCLA. While the Site is fenced, gaps exist at multiple locations, allowing potential direct contact with the contaminated soils at the Site and tracking contamination off-site exposing nearby human populations.

### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Through field based soil and debris evaluation, with the IEPA's XRF unit, soil contamination was detected not only on the floor of the former building, but also detected at various locations away from the former structures, throughout the property (lead ranged between 7480 mg/kg – 768,000mg/kg, zinc 5110 mg/kg – 146,000 mg/kg, and arsenic less than limit of detection – 36,300 mg/kg. All locations analyzed

contained one or more constituents, related to lead and zinc smelting, with concentrations well above U.S. EPA RML's. No confirmatory soil samples were collected during the August 10, 2004 site visit. However, to confirm these preliminary observations, soil samples were collected, as part of this April 2008 SI, throughout the property. Most were collected near those locations screened with the XRF during the August 10, 2004 site visit. Laboratory analytical results of the soil samples indicate numerous compounds and analytes significantly exceeding corresponding background levels and/or SCDM benchmarks throughout the property. Lead exceeds the site soil background levels in nineteen of the soil samples. Surface level total lead samples ranged from 521 mg/kg (background) to 54,000 mg/kg. Sediment samples for total lead along the north perimeter ranged from 469 mg/kg to 15,000 mg/kg. In addition, TCLP regulatory levels for lead were exceeded in all nine samples analyzed with the TCLP method. TCLP levels ranged from 11 mg/kg to 1700 mg/kg. Cadmium levels were exceeded in three samples ranging from 1.8 mg/kg to 7.3 mg/kg. The total approximate area of soil contamination is calculated to be 5.7 acres (248,292 square feet).

## **2. Current Activities**

### **2.1 Operations Section**

#### **2.1.1 Narrative**

The overall goal of this removal action is to prevent direct contact and off-site migration of contaminated soils from the LCS Site. This goal will be accomplished by removing highly contaminated surface soils and backfilling with clean earthen materials to provide a protective cover to prevent direct contact and migration of residual contaminated soils from the LCS Site.

#### **2.1.2 Response Actions to Date**

10/16/2013 - Office trailers delivered. Continue prep work: clearing brush; consolidating debris; electrical hookup completed.

10/17/2013 - Continue prep work: brush cutting; consolidating debris; found large pieces of lead in the building debris; most XRF scans around the site exceed 10,000 ppm for lead; suspected baghouse dust found in the southeast section of the site, exceeds the XRF limits of 100,000 ppm lead, may consider off-site treatment for this material.

10/18/2013 - Continue prep work: continue clearing; continue delivery of backfill; continue consolidating debris; investigating options for the 3000 plus yards of slag stockpiled in the south west section of the site. Contacted metal scrap dealer to inquire about the possible reuse of the slag due to the high metal content.

10/21/2013 - Continue prep work: continue clearing; continue backfill delivery; chipper brought onsite to begin grinding landscape debris which will be utilized on site. START continues to document site activities and update photos to the website. Visit from the Laborers Union rep today, unknown if local union issues will become a problem.

#### **2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)**

No PRPs were identified for this site, a Federal Warrant for Access was secured on September 12, 2013.

#### **2.1.4 Progress Metrics**

<i><b>Waste Stream</b></i>	<i><b>Medium</b></i>	<i><b>Quantity</b></i>	<i><b>Manifest #</b></i>	<i><b>Treatment</b></i>	<i><b>Disposal</b></i>
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## 2.2 Planning Section

### 2.2.1 Anticipated Activities

Continue site prep activities: additional heavy equipment and crew; continue site clearing and debris consolidation before excavation can begin. Debris removal to start 10/24. Continue grinding brush.

#### 2.2.1.1 Planned Response Activities

- Remove site debris and clear overgrown landscape material.
- Excavate surface soils with XRF screening to concentrate removal in areas with the highest contaminant levels.
- Treatment of soils with Enviroblend FG.
- Off-site disposal of treated soils.
- Backfill areas with clean earthen material to provide protective cover.
- Repair/replace fencing as needed.

#### 2.2.1.2 Next Steps

- Finish debris removal and site clearing.
- Begining excavation of soils and treatment for disposal.

### 2.2.2 Issues

Upon completion of the removal action a Deed Restriction will likely be place on the property as contamination beyond two feet will be present and limit future use of the property.

## 2.3 Logistics Section

Managed by the ERRS FCA

## 2.4 Finance Section

### 2.4.1 Narrative

Managed by ERRS FCA/RM and OSC.

### Estimated Costs \*

	Budgeted	Total To Date	Remaining	% Remaining
<b>Extramural Costs</b>				
ERRS - Cleanup Contractor	\$1,250,000.00	\$121,295.00	\$1,128,705.00	90.30%
TAT/START	\$25,000.00	\$7,500.00	\$17,500.00	70.00%
<b>Intramural Costs</b>				

<b>Total Site Costs</b>	\$1,275,000.00	\$128,795.00	\$1,146,205.00	89.90%

\* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

## **2.5 Other Command Staff**

### **2.5.1 Safety Officer**

#### **Federal OSC**

### **2.5.2 Liaison Officer**

Not required

### **2.5.3 Information Officer**

Janet Pope/USEPA is the CIC for this site.

## **3. Participating Entities**

### **3.1 Unified Command**

USEPA Fund Lead

### **3.2 Cooperating Agencies**

City of Chicago  
Illinois EPA

## **4. Personnel On Site**

EPA - 1  
START - 1  
ERRS - 5

## **5. Definition of Terms**

RML - Removal Management Level  
ERRS - Emergency Removal and Response Services  
START - Superfund Technical Assessment and Response Team  
XRF - X-Ray Fluorescence  
ATSDR - Agency for Toxic Substances and Disease Registry  
PPM - Parts per million  
LCS - Lake Calumet Smelter  
OSC - On-scene Coordinator  
EPA - Environmental Protection Agency

## **6. Additional sources of information**

### **6.1 Internet location of additional information/**

Website: [www.epaosc.org/lakealumetsmelter](http://www.epaosc.org/lakealumetsmelter)

### **6.2 Reporting Schedule**

Weekly Sitreps anticipated.

## **7. Situational Reference Materials**

Repository for documents will be established at a nearby facility.

Visit website: [www.epaosc.org/lakealumetsmelter](http://www.epaosc.org/lakealumetsmelter)